

**STATE OF NEW HAMPSHIRE**

**DRAFT 2014 Section 303(d)  
Surface Water Quality List**

**October 14, 2015**



NHDES-R-WD-15-11

**STATE OF NEW HAMPSHIRE**  
**DRAFT 2014 Section 303(d)**  
**Surface Water Quality List**

***STATE OF NEW HAMPSHIRE***  
***DEPARTMENT OF ENVIRONMENTAL SERVICES***  
***29 HAZEN DRIVE***  
***CONCORD, N.H. 03301***

***THOMAS S. BURACK***  
***COMMISSIONER***

***EUGENE J. FORBES P.E.***  
***DIRECTOR***  
***WATER DIVISION***

**Prepared by:**  
**Ken Edwardson.**

**October 14, 2015**

Printed on Recycled Paper

## TABLE OF CONTENTS

<b>CHAPTER 1</b>	<b>INTRODUCTION.....</b>	<b>1-1</b>
1.1	PURPOSE.....	1-1
1.2	ASSESSMENT METHODOLOGY AND TERMS .....	1-1
1.3	DATA.....	1-1
1.4	ASSESSMENT UNITS .....	1-2
1.5	TECHNICAL SUPPORT DOCUMENT FOR THE GREAT BAY ESTUARY .....	1-2
1.6	DES SURFACE WATER QUALITY ASSESSMENT WEBSITE .....	1-2
<b>CHAPTER 2</b>	<b>SECTION 303(D) LIST FORMAT .....</b>	<b>A</b>
2.1	OVERVIEW.....	A

## LIST OF APPENDICES

<b>APPENDIX A: SECTION 303(D) LIST .....</b>	<b>B</b>
--	----------

# CHAPTER 1 INTRODUCTION

## 1.1 PURPOSE

The Federal Water Pollution Control Act [PL92-500, commonly called the Clean Water Act (CWA)], as last reauthorized by the Water Quality Act of 1987, requires each state to submit a list of impaired waters to the U.S. Environmental Protection Agency (EPA) every two years. The document is typically called the “303(d) List”, so named because it is a requirement of Section 303(d) of the CWA. The 303(d) List includes surface waters that are:

- impaired or threatened by a pollutant or pollutant(s);
- not expected to meet water quality standards within a reasonable time even after application of best available technology standards for point sources or best management practices for nonpoint sources; and
- require the development of a comprehensive water quality study (i.e., called a Total Maximum Daily Load or TMDL study) that is designed to meet water quality standards.

## 1.2 ASSESSMENT METHODOLOGY AND TERMS

The 2014 Section 305(b) and 303(d) Consolidated Assessment and Listing Methodology (CALM) describes in detail how surface water quality assessment decisions were made in fulfillment of 40 CFR 130.7(b)(6). The CALM also includes descriptions and definitions of the many terms used to assess surface waters. A copy of the CALM is provided at <http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>. Readers are strongly encouraged to read the CALM before reviewing assessments as it will help one to better understand and interpret assessment results.

## 1.3 DATA

The 2014 assessments are supported by more than 1,000,000 grab samples and several million datalogger results. These data records were collected from more than 2,000 stream sites, 2,500 lake sites, and 640 marine sites and include over 180 water-quality and ecological parameters. Most of the data are available from the DES data warehouse at [http://www2.des.state.nh.us/OneStop/Environmental\\_Monitoring\\_Menu.aspx](http://www2.des.state.nh.us/OneStop/Environmental_Monitoring_Menu.aspx) or by contacting DES.

Additionally, the Surface Water Quality Assessment Viewer has been updated for the 2014 assessment cycle ([http://www2.des.state.nh.us/WaterShed\\_SWQA/SWQA\\_Map.aspx](http://www2.des.state.nh.us/WaterShed_SWQA/SWQA_Map.aspx)). This tool was developed for users to,

- 1) see the spatial extent of assessment units,
- 2) see where sampling data was collected,
- 3) access the watershed report cards, and

- 4) run reports to access the base data and water quality data summaries for the Aquatic Life and Primary Contact (i.e. Swimming) designated uses in the 2006, 2008, 2010, 2012, and 2014 assessment cycles.

## **1.4 ASSESSMENT UNITS**

Assessment Units (AU) are the basic unit of record for conducting and reporting water quality assessments.

To help determine the extent and/or location of each AU, visual aids such as maps are useful. To that end, a web mapping application was built and can be launched from the watershed Report Cards page

[http://www2.des.state.nh.us/WaterShed\\_SWQA/WaterShed\\_SWQA.aspx](http://www2.des.state.nh.us/WaterShed_SWQA/WaterShed_SWQA.aspx)

For those wishing to download the base GIS for use with the more common GIS software products AUs are available in Geodatabase format. All GIS layers may be accessed through the Department's FTP site by using the following instructions:

- 1) Go to this address using a web browser:  
<ftp://pubftp.nh.gov/DES/wmb/WaterQuality/2014/> (some browsers may require you to cut and paste this link directly).
- 2) At the login window, click on the box in the lower left hand corner labeled "Login Anonymously".
- 3) The User name will then be automatically filled in with the word "Anonymous".
- 4) Type in your email address in the Email Address block.
- 5) Then click on the Log On button.
- 6) The [GIS] Folder should appear containing the files described above.

## **1.5 TECHNICAL SUPPORT DOCUMENT FOR THE GREAT BAY ESTUARY**

The complexity of the Great Bay estuary presents a number of assessment challenges. In addition to the CALM (see section 1.2 above) a Technical Support Document for the Great Bay Estuary Aquatic Life Use Support Assessments, 2014 305(b) Report/303(d) List has been prepared to provide supplemental information regarding New Hampshire's 305(b)/303(d) assessments of the Great Bay Estuary. This document is meant to provide additional information about how the water quality status of each of the 19 assessment zone was determined. Specifically, this document addresses the water quality data used to determine if the Estuary meets the Aquatic Life designated use.

## **1.6 DES SURFACE WATER QUALITY ASSESSMENT WEBSITE**

The department's surface water quality assessment website (<http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>) contains the following materials needed for review of the draft 303(d) List:

- Consolidated Assessment and Listing Methodology (CALM) (PDF)
  - Response to Comments on CALM (PDF)
- 2014, Draft 303(d) List - Content Introduction (PDF)
  - 2014, Draft 303(d) List (PDF)
  - 2014, Draft 303(d) List (EXCEL)
  - Waters Removed Since the 2012 Section 303(d) List (PDF)
  - Map of Draft 303(d) Impaired Waters (PDF)
- Request for Comments on the 2012, Draft 303(d) List (PDF)

Other Related materials

- Technical Support Document for the Great Bay Estuary Aquatic Life Use Support Assessments, 2014 305(b) Report/303(d) List (PDF)
- GIS Layers for the Draft 2014 Assessment (PDF)
- Impairments Removed Since the 2012 305(b) (PDF)
- Impairments Added to the 2014 305(b)/303(d) (PDF)

## **CHAPTER 2    SECTION 303(D) LIST FORMAT**

### **2.1    OVERVIEW**

The Section 303(d) List is provided in Appendix A. As previously mentioned, the Section 303(d) List only includes waters that are impaired or threatened by pollutants that require Total Maximum Daily Load studies (TMDLs). Consequently, the 303(d) List represents a subset of all impaired waters as not all impairments require a TMDL.

The List is sorted by waterbody type and then Assessment Unit ID number or AUID (each waterbody has a unique AUID). Each record includes the impaired designated use in that assessment unit, the cause of impairment, the probable source of impairment, and an estimated TMDL priority. As mentioned in Section 1.2, the reader is encouraged to review the 2014 Consolidated Assessment and Listing Methodology before reviewing the assessments as it will help one to better understand and interpret the assessment results.

## **APPENDIX A: Section 303(d) List**